

Please attempt the following questions in preparation for the online session on 9th February.

Completing the square

Q1. Express $x^2 + 10x + 17$ in the form $(x + p)^2 + q$.

Q2. Express $x^2 - 14x + 50$ in the form $(x - a)^2 + b$.

Q3. Express $x^2 - 12x + 40$ in the form $(x - p)^2 + q$.

Q4. Express $x^2 + 8x - 5$ in the form $(x + a)^2 + b$.

Q5. Express $x^2 - 4x - 15$ in the form $(x - p)^2 + q$

Q6. Express $x^2 - 3x + 2$ in the form $(x - a)^2 + b$

Q7. What are the coordinates of the turning point of the graph with equation $y = (x - 5)^2 + 2$?